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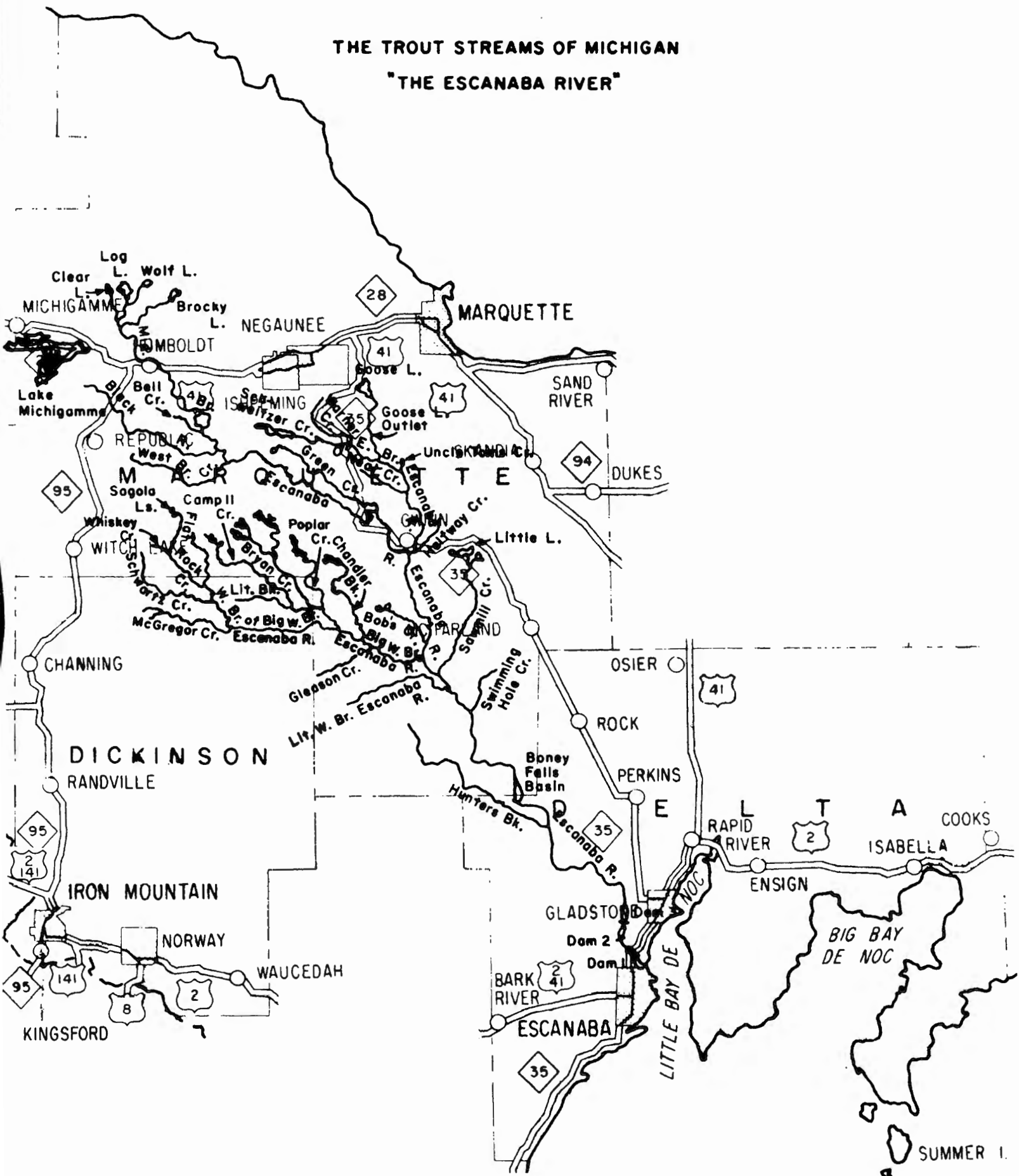
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In the north part of Marquette County just a few miles northeast of the eastern tip of Lake Michigamme, the outlets of Brocky, Wolf, Log, and Clear Lakes join to form the Middle Branch of the Escanaba River. From here it flows south and east to the Village of Gwinn, a distance of about 75 stream miles where it is joined by the East Branch to form the Main Escanaba River. From the Village of Gwinn the stream flows southward another 25 miles to Boney Falls impoundment on the Marquette-Delta county line. Halfway through this stretch, it is joined by another major tributary, the Big West Branch of the Escanaba. Below Boney Falls impoundment, the Escanaba flows southeast for another 20 miles before it empties into Little Bay de Noc just north of the City of Escanaba. There are three dams in the lower five miles of stream with the lowermost one less than a mile from the stream mouth. U.S. Geological Survey figures indicate a total drainage area of 923 square miles.

The Middle Branch of the Escanaba

The four lakes whose outlets form the Middle Branch lie among the rocks, knobs, and ridges of that part of the Canadian Shield exposed south of the Lake Superior shore. They are trout lakes being managed primarily for rainbow and brown trout.

In this rugged terrain, the outlet streams tumble over rocks and riffles, glide along the base of cliffs, and rest in pools populated with brook, brown, and rainbow trout. Brook trout are the most abundant. Though the streams are not too far from traveled roads, the rugged terrain screens out all but a few local fishermen whose knowledge of the country leads them directly to the most productive pools. There is an abundance of natural reproduction, but the size of these feeder streams limits the production of larger fish and seriously handicaps the fly fisherman.

As the Middle Branch flows south, its volume is increased by ground water seepage, springs, and small tributaries. By the time it reaches the Humboldt area, it boasts a flow of at least 9 cubic feet per second (cfs) 90% of the time. At this point, the Cleveland Cliffs Iron Company once pumped water from the stream for use in their ore beneficiation plant. Some of the water thus diverted was returned via Black River, which is tributary to the Middle Branch, about 16 stream miles below the Humboldt area.

Below the Humboldt, the Middle Branch is canoeable; and occasionally fishermen and others negotiate the stretch from here to the Cataract Basin, some 45 to 50 miles below. The most convenient access for canoes is immediately below the US-41 highway bridge at Humboldt. Though the stream flows through rugged and relatively undeveloped country from Humboldt to the Cataract Basin, it is crossed by five bridges; and

there are several other access points all fairly evenly spaced, so the entire stretch can be negotiated by a series of short trips tailored to fit the time available to the canoeist. Much of the stream, particularly the lower portions, is also boatable by small boats; but the necessity to portage around half a dozen or more waterfalls makes the canoe the most practical vehicle for floating the stream.

A healthy brook trout population dominates the headwaters of the Middle Branch and its tributaries below Humboldt. However, recruitment to the main stream below Humboldt appears to be limited to those parts of the stream near the mouths of the tributaries. The tributaries include Bell Creek, Black River, West Branch Creek, and several smaller unnamed streams. These augment the flow in the Middle Branch, sustain some excellent brook trout fishing of their own, and provide recruitment to the main stream below. Spawning success in the main stream, judging from fish collections, does not appear to be very impressive. Except for this one factor, the habitat is excellent for trout; and a good fishery for large brown trout is maintained via a stocking program. The many riffles and rapids with quieter waters at their lower ends and the pools below the waterfalls provide excellent opportunities for fly fishermen and spin casters.

The water in the main stream and some of the tributaries, particularly the Black River, has a brownish cast from swamp leachings and iron deposits in the area. The waterfalls, the heavily wooded areas, and the bald knobs of Canadian Shield rock over a half-billion years old make this a most scenic area to traverse.

About five miles northwest of the Village of Gwinn and about one stream mile above the Cataract Basin, the stream is bridged by Highway M-35. In this area the stream averaged about one hundred feet in width, and the current is slow. It and the Basin provide excellent northern pike and good yellow perch fishing.

Water stored in the Basin is used to operate a power plant situated about 300 yards below the dam. Water thus used is returned to the original stream channel a short distance above the mouth of Green Creek which is about one stream mile below the dam. No minimum flow requirement has been established for that portion of the original stream channel between the dam and the mouth of Green Creek. This channel provides some very good northern pike fishing in the spring and some fair trout fishing after the spring runoff.

Between the dam and its junction with the East Branch at the Village of Gwinn (about 5 stream miles), the Middle Branch courses swiftly between high banks over a bottom consisting chiefly of large boulders. Wading this stretch is treacherous at best. The river's width spans seventy-five to a hundred feet; and due to the operation of the power plant, flow fluctuates widely. Under full capacity, the release is 300 cfs. When the plant is not in operation, the flow drops to 10 cfs in the main channel. About 5 to 10 cfs more is added after the confluence of Green Creek. Some good trout fishing is available here, but the flow characteristics make it unpredictable.

Green Creek has long been an excellent brook trout stream, providing opportunities for both fly and bait fishermen. In recent years, however, more than one square mile of its extreme headwaters has been dyked to provide a settling basin for the Empire Mine pelletizing plant; and this is scheduled to increase to more than five square miles. This development will predictably increase temperatures, discolor the water and increase siltation in the fifteen to twenty miles of stream below. We can expect loss of this good productive trout habitat in the near future.

The East Branch of the Escanaba

The East Branch of the Escanaba River is formed by the junction of Warner and Schweitzer Creeks about four miles southeast of the Village of Palmer. Both creeks are coldwater streams with good brook trout populations maintained by natural reproduction. Both flow through rugged, rocky country timbered with hardwood and pine. Streambank cover is mostly tag-alder which limits fly fishing, but bait fishermen enjoy some excellent fishing for trout running 12 to 13 inches. Warner Creek flows unobstructed, but Schweitzer has a 48 foot head dam about five miles above its mouth from which water is pumped to the Empire Mine pelletizing plant and thence to the settling basins on the headwaters of Green Creek. Minimum flow requirement below the dam is 3.5 cfs.

The East Branch flows east for three or four miles, then swings gradually to the south toward the Village of Gwinn and its junction with the Middle Branch. Its total length is approximately 18 to 20 miles, and it flows through less rugged country than does the Middle Branch. Rocky knobs are fewer and lower, the soil is sandy, and there is more brush cover and more openings. The stream skirts the western edge of what is known locally as the "Sands Plains". It is the most productive branch of the Escanaba River system due largely to fertility added by the waters of Goose Lake Outlet which joins the East Branch a few miles below the junction of Warner and Schweitzer Creeks.

Goose Lake, until the 1950's, received sewage effluent from the City of Negaunee. The upper two or three miles of the outlet is marginal for trout because of the higher temperatures of the lake water, but this is soon overcome by springs and ground water seepage. The lower three-quarters of the stream (5 to 6 miles) plus the East Branch below its mouth, is very productive of nice sized brook, brown and rainbow trout. Gravel riffles and frequent pools provide excellent opportunities for both bait and fly fishing.

More nutrients enter the East Branch from various sources at the Village of Gwinn. Although they are considerably diluted at the junction with the Middle Branch, steps are being taken to control these discharges to protect the recreational values of the stream.

The East Branch from Goose Lake outlet to the junction with the Middle Branch is one of the most popular trout streams in the Upper Peninsula. Reproduction in the main stream and in the tributaries (Uncle Tom's

Creek, O'Neal Creek, Halfway Creek and several unnamed) is more than adequate to maintain an excellent trout population. Normal summertime flow is estimated at about 30 cfs--Gwinn gaging station.

The stream lies almost entirely within the boundaries of the Michigamme and Escanaba River State Forests. Approximately four miles of frontage is in state ownership. This ownership is scattered with stretches of private ownership in between; but since the stream is both wadeable and canoeable, all of it is fishable by the public. Fishing pressure is fairly heavy, and success is above average. Most of the stream lends itself well to fly fishing, but most of the pressure is from bait fishermen.

The West Branch of the Escanaba

In the southwest part of Marquette County directly east of Republic and in the north part of Dickinson County within the boundaries of the Michigamme State Forest, the land is level to gently rolling and the soils are sandy. The area is wooded to semi-open with an array of small lakes in the extreme northern part. It is traversed by two-rut sand plains roads with a short stretch of county-maintained gravel road in the southeast part. In this area, a number of small streams find their sources in the lakes and in springs and ground water seepage percolating through the porous sandy soils. Most of them cross the Marquette-Dickinson county line between tiers 44 and 45 north; and in so doing, some of them have their names changed so designation by name, in many instances, is confusing to one not familiar with the area.

Flatrock Creek, flowing southward from the Sagola Lakes, is joined by Whiskey Creek, Wildwest Creek, McGregor Creek and several smaller unnamed streams before its confluence with Schwartz Creek two miles south of the county line where it becomes the West Branch of the Big West Branch of the Escanaba River. From this confluence the stream flows eastward to be joined by the North Branch of the Big West Branch of the Escanaba River (also known as Bryan Creek, among others, depending upon where you are in the watershed and which map you are using as a reference). This watershed consists of Bryan Creek which rises in several small private lakes owned by the "Northwoods Club" and flows southeastward to be joined by North Branch Creek, Clear Creek, Camp Eleven Creek, Little Brook, and Poplar or Big Brook. This stream finally joins with the West Branch of the Big West Branch in southeastern Marquette County between ranges 27 and 26 west to become the "Big West Branch of the Escanaba River". All of the streams which converge at this point are coldwater streams with low brushy banks and shifting sand bottoms. Brook trout predominate; and in spite of the shifting sand bottoms, there is enough gravel to provide for adequate spawning and there is no lack of natural reproduction or fish food organisms. This feature was improved upon to some extent a few years ago by a stream improvement project in the West Branch of the Big West Branch in both counties.

These small drainages represent well over one hundred miles of stream and, though they are difficult to fish, they produce some fine catches

of brook trout for those hardier fishermen who are willing to fight the brush and shifting sand in pursuit of their favorite recreation. Conditions dictate natural baits and short rods, but well-beaten streamside paths provide evidence that a fair sized segment of the fishing fraternity still enjoy unsophisticated fishing in wild settings unspoiled by the progress of civilization.

The three to five mile stretch of the North Branch of the Big West Branch beginning at the county line and extending to the mouth is only occasionally fished by canoe or small boat, but it seldom fails to produce. Fishing this stretch by any other means is essentially impossible.

The Big West Branch of the Escanaba River begins with the confluence of the West Branch and the North Branch in Marquette County. It flows eastward for eight to ten miles to the Escanaba River. It is large enough to be negotiated by canoe or small boats which can be lifted over logs or log jams. It yields rainbow trout, brook trout and brown trout in that order of abundance. It is well suited to fly fishing. Chandler Brook which originates in Pike Lake seven land miles to the north is its largest tributary with Gleason Creek, from the southwest, the only other tributary. Both are brook trout streams with fair to good natural reproduction which contributes to the population in the main stream.

The Big West Branch is in the Escanaba River State Forest and like all the waters above, most of the frontage is in public ownership and retains most of the natural beauty associated with wilderness areas.

The Main Escanaba River

The main Escanaba River, formed by the junction of the Middle and East Branches near the Village of Gwinn, flows southward for 45 to 50 miles before emptying into Lake Michigan's Little Bay de Noc at the City of Escanaba. There are four impoundments in this stretch. The first, the Boney Falls Basin, is about twenty-five stream miles below Gwinn at the Marquette-Delta county line. The other three are situated in the lowermost five miles of stream. All are operated by the Mead Corporation's Escanaba Paper Mill for power generation and paper processing.

The main Escanaba is a large stream. The U.S. Geological Survey records show the combined, five-year average discharge of the Middle and East Branches to be 277 cfs. This volume is gradually increased by waters from the Big West Branch, Bobs Creek, the Little West Branch, Sawmill Creek, Hunters Brook and a half dozen smaller tributaries so that the twenty-five year average flow at Cornell (about 15 miles from the mouth) is 897 cfs.

From Gwinn to the Boney Basin, the Escanaba flows through forested land, most of it within the boundaries of the Escanaba River State Forest. About seventy-five percent of the frontage is in public ownership with usable access points spaced about five miles apart. It is

a popular stretch of stream for trout fishermen, campers, boaters and sightseers. The stream bottom consists entirely of rock ranging from coarse gravel through rubble and large boulders to solid bedrock. Gradient is quite even throughout with short runs of rapids separating the many pools. Brook trout, brown trout and rainbow trout are found in both the rapids and pools; and their relative abundance in either type of habitat varies with the seasons, water levels, temperatures, time of day, and weather. Trout foods are abundant, and good fishermen are frequently rewarded with limit catches of "bragging" size fish.

About twelve miles south of Gwinn the Big West Branch joins the stream from the west and adds a considerable amount to the volume of flow. There is a convenient access point a short distance below the mouth of the Big West and some good trout fishing waters in the immediate vicinity. About two miles farther downstream on the east bank is the mouth of the Sawmill Creek with areas suitable for an overnight stop. The Sawmill is a small but excellent brook trout stream, and it contributes much to the trout fishery in the Escanaba at this point. About four stream miles below Sawmill Creek is the Escanaba River State Forest campground near the mouth of Swimming Hole Creek. The deep pool at the creek's mouth where the Escanaba rests before entering the series of rapids below gives this stream its name. This is a popular spot amongst those anglers who are out for an evening of fishing since, if they are not successful in the pool, they are almost sure to be rewarded in the rapids below.

The stream bends sharply to the east at the base of a high bluff four miles below the campground; then three miles further it swings back again to the south and flows a mile or two farther before entering the Boney Falls Basin. Trout continue to dominate the fish populations into the upper extremity of the impounded waters; but below this, largemouth and smallmouth bass and jumbo size yellow perch enter the fishing picture. Northern pike also frequent the Basin, but they are not abundant.

The Boney Falls Dam has a head of 48.5 feet and impounds about 200 acres. It was built at the site of a natural waterfall by Mead Corporation in 1920-21 for the generation of electricity.

From the Boney Falls Dam down to Dam #3, the Escanaba retains its characteristic features of long pools separated by runs of rapid water over a rocky bottom. Volume of flow fluctuates with the operation of the power plant at the dam.

This is a very productive stretch of stream having an abundance of fish food organisms in the form of insect larvae, minnows, and crayfish. It is a favorite among fly fishermen of the area who often make catches of trout in the sixteen to twenty inch range. Trout reproduction is not adequate here, so populations are maintained by annual plantings of brooks, browns, and rainbows which grow rapidly. Trout tend to concentrate in the deeper pools and in cracks and fissures in the stream bottom. Many of these lies have acquired names over the years such as The Orchard, Shays Hole, Gravel Pit, Burnt Camp, The Island, etc.

There are a dozen or more such locations which are fished regularly and for good reason by the local fishermen. Northern pike are also present in many of these locations; and although they occasionally arouse the ire of trout fishermen, they do not otherwise appear to be too great a threat.

The five miles of river from the impoundment behind Dam #3 to the mouth is non-trout water. Dam #2 is a mile below Dam #3 and about two miles below this is Dam #1. These impoundments produce bass, northern pike, and panfish; and in the mile of river below Dam #1 a good fishery exists for bass, northern pike, smelt, and occasionally walleye.